

Docket No. 99-006RCE1

Serial No. 09/460,174

IN THE CLAIMS:

No claims are presently amended. All claims are listed below for the convenience of the examiner.

1. (Previously Presented) A communication system that provides an optimum connector path between a hard-wired terminal and a mobile data unit comprising:

means for locating a serving switch of a wireless communication system that was last in contact with said mobile data unit without attempting to first establish communication with another hard-wired terminal;

means for assigning a temporary local directory number to said serving switch; and

means for communicating with said mobile data unit including a hard-wired data unit being connected to an alternate non-public switched telephone network and to the public switch telephone network at a location local to said serving switch and dialing said temporary local directory number to activate a connection with said serving switch, thereby establishing a communication link between said hard-wired terminal and said mobile data unit.

2. (Original) A communication system as set forth in claim 1, wherein said locating means includes a database in which the identity of the visited location register last in contact with the mobile data unit is stored.

3. (Original) A communication system as set forth in claim 1, wherein said assigning means assigns a temporary local directory number based on the geographic location of said serving switch.

4. (Original) A communication system as set forth in claim 3, wherein said temporary local directory number is used to select said hard-wired data unit from a pool of geographically disposed hard-wired data units by comparing characteristics of said temporary local directory number with characteristics of each phone number

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associated with each said hard-wired data unit on said public switch telephone network.

5. (Previously Presented) A communication system as set forth in claim 1, wherein said communicating means includes a server for controlling communication through said alternate non-public switched telephone network.

6. (Original) A communication system as set forth in claim 5, wherein said alternate network is based on the Internet protocol.

7. (Original) A communication system as set forth in claim 5, wherein said server, operating through said alternate network, selects a local communication path to said serving switch.

8. (Original) A communication system as set forth in claim 1, wherein said serving switch is local to said mobile data unit so that all calls made through said serving switch will be local calls.

9. (Original) A communication system as set forth in claim 1, wherein said assigning means assigns a temporary local directory number by selecting from a pool of numbers whose geographic base is said serving switch.

10. (Previously Presented) A telephone system, comprising:
a hard-wired terminal;
a wireless data unit;
an alternate non-public switch telephone network controlled by at least one server;
a home location register addressable by said server;
a visited location register in selective communication with said home location register, said home location register including a database showing that said visited location register was last in communication with said wireless data unit;

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a serving switch of a wireless communication system that was in communication with said wireless data unit and with said visited location register; said visited location register establishing a temporary local directory number for said serving switch and forwarding said temporary local directory number to said home location register for delivery to said server; and

a hard-wired data unit connected to said alternate network and to the public switch telephone network, that uses said temporary local directory number to call said serving switch to establish communication with said wireless data unit,

wherein a communication link is established between said hard-wired terminal and said wireless data unit without first attempting to establish a communication link with another hard-wired terminal.

11. (Original) A telephone system as set forth in claim 10, wherein said alternate network is an Internet protocol based network.

12. (Original) A telephone system as set forth in claim 10, wherein said alternate network includes a pool of hard-wired data units, said hard-wired data units dispersed at geographically remote locations with said server selecting one of said hard-wired data units using said temporary local directory number.

13. (Original) A telephone system as set forth in claim 12, wherein said server compares said temporary local directory number with a phone number assigned to each of said hard-wired data units on said public switch telephone network to determine said hard-wired data unit closest to said serving switch so as to establish a local call over the public switch telephone network.

14. (Previously Presented) A telephone system for communicating between a hard-wired terminal and a mobile terminal, including a server connected to and controlling an Internet based protocol network for determining the temporary local directory number of a last serving switch in contact with said mobile terminal and for using said temporary local directory number to establish communication with said mobile terminal, without attempting to first establish communication with another

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hard-wired terminal, through use of said Internet based protocol network and a public switch telephone network.

15. (Previously Presented) A telephone system as set forth in claim 14, wherein said temporary local directory number can come from a standard numbering plan whose numbers are normally dialable, or from a non-standard numbering plan whose numbers are normally not dialable.

16. (Previously Presented) A method for providing an optimum connector path between a hard-wired terminal and a mobile data unit comprising the steps of:

- locating a serving switch of a wireless communication system that was last in contact with said mobile data unit;
- assigning a temporary local directory number to said serving switch; and
- communicating with said mobile data unit without attempting to first establish communication with another hard-wired terminal, including the sub-steps of
 - connecting a hard-wired data unit to an alternate non-public switched telephone network and to the public switch telephone network at a location local to said serving switch,
 - dialing said temporary local directory number, and
 - activating a connection with said serving switch.

17. (Previously Presented) A telephone system as set forth in claim 10, wherein said home location register is not associated with a home mobile switch.

18. (Previously Presented) A telephone system as set forth in claim 17, wherein said wireless data unit operates only in a roaming state.

19. (Previously Presented) A system for communicating between a hard-wired terminal and a wireless data unit, comprising:

- a public switched telephone network;
- an alternate non-public switch telephone network controlled by at least one server and containing at least one hard-wired data unit; and

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a wireless communication network for communicating with said wireless data unit, comprising:

a home location register addressable by said server but not associated with a home mobile switch;

a visited location register in selective communication with said home location register, said home location register including a database showing that said visited location register was last in communication with said wireless data unit;

a serving switch in communication with said wireless data unit and with said visited location register, wherein a temporary local directory number for said serving switch is established by said visited location register, said temporary local directory number being forwarded to said home location register for delivery to said server of said alternate non-public switch telephone network;

wherein said at least one hard-wired data unit on said alternate non-public switch telephone network is also in communication with said public switch telephone network, and wherein said at least one hard-wired data unit uses said temporary local directory number to call said serving switch to establish a communication path between said hard-wired terminal and said wireless data unit.

Claim 20. (Cancelled)

21. (Previously Presented) A communication system as set forth in claim 19, wherein said alternate non-public switch telephone network is an Internet protocol based network.

22. (Previously Presented) A communication system as set forth in claim 19, wherein said alternate non-public switch telephone network includes a pool of hard-wired data units, said hard-wired data units dispersed at geographically remote locations with said server selecting one of said hard-wired data units using said temporary local directory number.

23. (Previously Presented) A communication system as set forth in claim 22, wherein said server compares said temporary local directory number with a phone

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number assigned to each of said hard-wired data units on said public switch telephone network to determine said hard-wired data unit closest to said serving switch so as to establish a local call over the public switch telephone network.

24. (Previously Presented) A method of communicating between a hard-wired terminal and a wireless data unit, comprising the steps of:

initiating a call to said wireless data unit while upon an alternate non-public switch telephone network controlled by at least one server;

establishing communication between said alternate non-public switch telephone network and a wireless network, said wireless network including a home location register addressable by said server but not associated with a home mobile switch;

retrieving a temporary local directory number assigned to said wireless data unit by said wireless network, said temporary local directory number being relayed from said wireless network to said server of said alternate non-public switch telephone network;

selecting a hard-wired data unit from a pool of geographically disposed hard-wired data units by comparing characteristics of said temporary local directory number with characteristics of each phone number associated with each said hard-wired data unit; and

establishing communication from said hard-wired terminal to said hard-wired data unit on said alternate non-public switch telephone network, and then on through said public switched telephone network, to said wireless data unit on said wireless network.

25. (Previously Presented) A method as set forth in claim 24, wherein said alternate non-public switch telephone network is based on the Internet protocol.